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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,376	09/25/2003	Syuhei Moribe	02910.000082	3358

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EXAMINER

RODEE, CHRISTOPHER D

ART UNIT	PAPER NUMBER
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1756

DATE MAILED: 07/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/669,376

Applicant(s)

MORIBE ET AL.

Examiner

Christopher RoDee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-11 is/are rejected.
- 7) ☒ Claim(s) 4,5 and 10 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/25/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsunaga *et al.* in US Patent 5,976,752.

Matsunaga discloses a toner containing a polyester binder resin, a colorant, and a wax (Abstract). The toner also contains a THF insoluble content of from 5 to 50 wt. %. The toner also has 35.0 to 65.0 wt % of a component having a molecular weight of from 500 to 10000 for the THF soluble components (Abstract). The toner has good dispersibility of the colorant and wax (Abstract; col. 4, l. 1-3).

As seen in Table 6, the exemplified polyester binder resins in Examples I-1 through I-5 contain THF insolubles of 31, 32, 33, and 36 wt. % (col. 59). Example I-4 has 50.6 wt % of a component having a molecular weight of from 500 to 10000 for the THF soluble components. The polyester binder resin is formed from a mixture of low-crosslinked and high-crosslinked polyesters (col. 51, l. 25-67; Tables 1-3). The wax in the exemplified toners is a hydrocarbon wax (Table 5), which shows good dispersibility (Table 7).

The reference does not disclose the wettability measured by optical transmittance in the methanol and water mixed solvent or the melt index, but it appears that the reference inherently has these features because the toner has the requisite THF soluble and insoluble

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characteristics as well as the requisite molecular weight characteristics of the claims. Given these similarities and the concern for maintaining good dispersion of the wax and colorant in the toner (compare with spec. p. 12, l. 16+) the artisan would expect the prior art toner to inherently have the requisite characteristics of the claims.

Claims 1-3 and 6-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Karaki *et al.* in US Patent 6,485,875.

Karaki discloses a toner having a polyester binder resin, a colorant, and a wax (Abstract). The exemplified toners in Table 2 contain a mixture of polyester polymers, a magnetic material as the colorant, a hydrocarbon wax, and a combination of aluminum aromatic hydroxycarboxylic acid compound and monoazo iron compound charge control agents.

Exemplified toners contain amounts of THF insolubles as specified in Table 3, such as 13.9 wt. % In Example I-1 (col 27, l. 22+). This example also contains 49.6 weight % (rounds to 50 %) of binder resin components with a molecular weight of 10000 or less for the THF solubles, a polyethylene wax, and magnetic iron oxide. Based on the large amount of components with a molecular weight at or below 10,000 it appears that the polymer inherently has a peak at or below 10,000. This example also contains a mixture of silica external additives as required by dependent claim 11.

The reference does not disclose the wettability measured by optical transmittance in the methanol and water mixed solvent or the melt index, but it appears that the reference inherently has these features because the toner has the requisite THF soluble and insoluble characteristics as well as the requisite molecular weight characteristics of the claims. Given these similarities and the concern for maintaining good dispersion of the wax and colorant in the

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toner (compare with spec. p. 12, l. 16+) the artisan would expect the prior art toner to inherently have the requisite characteristics of the claims.

Allowable Subject Matter

Claims 4, 5, and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher RoDee whose telephone number is 571-272-1388. The examiner can normally be reached on most weekdays from 6:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cdr
6 July 2005


**CHRISTOPHER RODEE
PRIMARY EXAMINER**